

DR MANIKANDAN
M.S GENERAL SURGERY 2016-2019 BATCH
MMC AND RAJIV GANDHI GOVERNMENT
GENERAL HOSPITAL
CHENNAI- 03

ABSTRACT

An anal fissure is a linear ulcer of the lower half of the anal canal.

It is classified into two types :

1. Acute fissure in ano
2. Chronic fissure in ano

Acute fissures are those presenting within three to six weeks of onset of symptoms. Chronic fissures are those presenting after six weeks of onset of symptoms. Acute fissure usually presents with tearing or burning discomfort during defecation. They are usually self healing. Chronic fissures are more persistent and relapsing compared to acute fissures. Acute fissures are usually managed medically. Most effective drugs are calcium channel blockers, either orally or topically . Chronic fissures are managed either medically or surgically, by means of lateral

sphincterotomy. The present study has compared the effectiveness of calcium channel blockers as local ointments (2% Diltiazem cream) and lateral sphincterotomy in the treatment of chronic fissure in ano. The percentage of symptomatic relief in patients suffering from chronic fissure in ano after the usage of 2% diltiazem cream and lateral sphincterotomy were analysed at first , second and third month after initiation of therapy.

With results we conclude that Lateral sphincterotomy is more effective than using calcium channel blockers as local ointments in the treatment of chronic fissure in ano.

INTRODUCTION

A fissure in ano is a tear in the anoderm distal to the dentate line. It is one of the most common painful condition of perianal region. It occurs following trauma, passage of hard stools or prolonged diarrhea. It is classified into acute and chronic fissure depending upon the duration of symptoms. A tear in the anoderm causes spasm of the internal anal sphincter, which results in pain, increased tearing and decreased blood supply to the anoderm. This cycle of pain, spasm and ischemia contributes to the development of a poorly healing wound that becomes a chronic fissure.

Therapy focuses on breaking the cycle of pain, spasm and ischemia thought to be responsible for development of fissure in ano. It can be either medical or surgical. There are various chemical agents used for relaxing the tone of internal anal sphincter. Of these, calcium channel blockers (2% Diltiazem) as local ointments are used in this study because of its better healing rate and least side effects. Gold standard surgical treatment for chronic fissure in ano is lateral internal sphincterotomy.

Many patients prefer a conservative approach to this condition by using 2% Diltiazem cream when compared to surgical approach by lateral internal sphincterotomy. Hence, the present study has been designed keenly taking into consideration the percentage of symptomatic relief after both the techniques as the primary objective.

This study has been conducted in Madras Medical College & RGGGH, Chennai-3, with the patients suffering from chronic fissure in ano attending the surgical OPD. Ethical committee approval was obtained prior as per protocol. Present study includes 50 Patients of chronic fissure in ano treated during July 2017 to June 2018.

AIMS AND OBJECTIVES

1. To analyze and compare the clinical response of calcium channel blockers as local ointment (2% Diltiazem cream) and lateral internal sphincterotomy in the treatment of chronic fissure in ano.
2. To assess the role of lateral internal sphincterotomy and its benefit during the follow up of these cases.

MATERIALS AND METHODS

Sample size : 50 cases

Study design : Prospective study

Study population : 50 cases

Study period : July 2017 to June 2018

Study centre: Madras medical college & Rajiv Gandhi Government
General hospital. **Subject selection :**

Inclusion criteria :

The patients admitted to various surgical wards in RGGGH as CHRONIC FISSURE IN ANO (Symptoms more than 6 weeks) .

Exclusion criteria :

1. Patients not willing to use local calcium channel blocker ointments
2. Patients not willing for surgery (Lateral sphincterotomy)
3. Patients not fit for surgery .

ASSESSMENT OF PARAMETERS

50 Patients included in the study are divided into two groups .

1. Group A (25 patients) - were subjected to use Calcium channel blocker ointment locally for treating chronic fissure in ano.
2. Group B (25 patients) - were subjected for surgical procedure, Lateral internal Sphincterotomy for treating chronic fissure in ano.

All patients were followed at First , Second and Third month respectively after both procedures. All patients were analyzed for % of symptomatic relief during each month . It can be split up as follows :

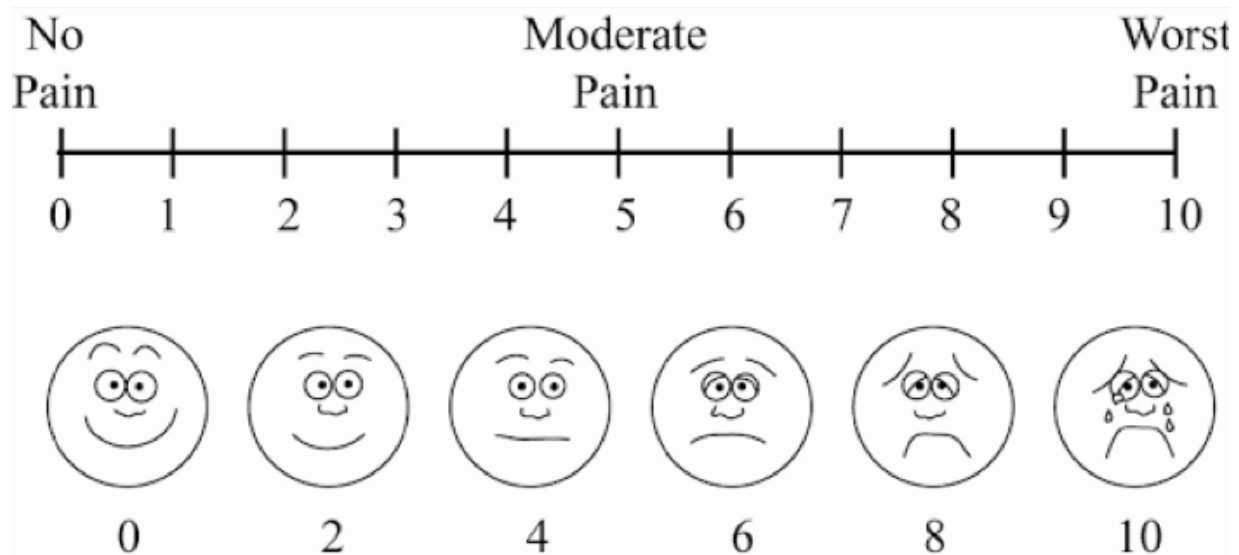
1. Relief from pain - 20%
2. Relief from constipation - 20%
3. Relief from Bleeding PR - 20%
4. Relief from Itching / others - 20%
5. Amount of fissure healing - 20 %

% out of 100 is calculated for all Patients in both the groups during first, second and third months. Results were analyzed. For pain assessment , all Patients were given with a pain scoring chart and instructed to mark the level of pain in it daily . Average is taken during each month. Scoring given for

No pain - 20% . Mild pain - 15% . Moderate pain - 10% . Severe pain - 5% . Worst pain - 0% .

PAIN ASSESSMENT USING VISUAL ANALOGUE SCALE

VISUAL ANALOGUE SCALE										
0	1	2	3	4	5	6	7	8	9	10
<div style="display: flex; justify-content: space-between; padding: 5px;"> <div style="width: 20%;">NOPAIN</div> <div style="width: 20%;">Annoying (mild)</div> <div style="width: 20%;">Uncomfortable (moderate)</div> <div style="width: 20%;">Horrible (severe)</div> <div style="width: 20%; text-align: center;">W O R S T</div> </div>										



Relief from Bleeding PR can be assessed as Nil bleed-20% , Streaks of blood with stool occasionally- 15% , Obvious blood in stools occasionally- 10%, obvious blood in stools most of the time- 5%, Blood alone passed- 0%.

Amount of Fissure Healing is assessed visually .

All collected data will be analyzed and conclusions derived .

CONCLUSION

Fissure in ano is a common problem today, due to unhealthy sedentary life style and decreased consumption of fiber. Most patients present with chronicity of symptoms.

Two main treatment approach for this conditions include calcium channel blockers used as local ointments (2% Diltiazem cream) or surgical treatment with Lateral internal sphincterotomy.

This study compares the effectiveness of calcium channel blockers as

local ointments and lateral sphincterotomy in the treatment of chronic fissure in ano. In this study it was observed that Lateral internal sphincterotomy in comparison with calcium channel blocker ointments is superior in relieving symptoms like pain , constipation , bleeding per rectum , Itching and has improved fissure healing .

Thus this study concludes that Lateral internal sphincterotomy is more effective in the treatment of chronic fissure in ano than local calcium channel blocker ointments (2%Diltiazem) .

Hence, Lateral sphincterotomy can be offered as a permanent cure for the patients diagnosed with chronic fissure in ano THAT THE CONSERVATIVE APPROACH.

KEY WORDS

Fissure, lateral sphicterotomy, diltiazem, nitroglycerine, notara, calcium channel blockers, levator ani, external sphincter, internal sphincter, anal canal, anal papille, skin tag

